

IN THE CLAIMS:

The following listing of the claims will replace all previous versions and listings:

Claims 1-44 (cancelled)

45. (previously presented) Nucleic acid sequence, coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1.

46. (previously presented) Nucleic acid sequence according to claim 45, wherein the nucleic acid sequence comprises a range of at least 1000 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1.

47. (previously presented) Nucleic acid sequence according to claim 45, wherein the nucleic acid sequence comprises a range of at least 1500 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1.

48. (previously presented) Nucleic acid sequence according to claim 45, wherein the nucleic acid sequence comprises the sequence represented in SEQ.ID. No. 1.

49. (previously presented) Nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising the sequence represented in SEQ.ID. No. 2.

50. (previously presented) Nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising the sequence represented in SEQ.ID. No. 3.

51. (previously presented) Expression system, comprising at least one nucleic acid coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1.

52. (previously presented) Expression system according to claim 51, further comprising at least one terminator and/or a linker.

53. (previously presented) Nucleic acid construct, comprising a nucleic acid sequence according to claim 45 and at least part of an expressible nucleic acid sequence selected from the group comprising expressible nucleic acid sequences, which code for translation products, which have a direct or indirect action and functional nucleic acids.

54. (previously presented) Nucleic acid construct according to claim 53, wherein the part of the expressible nucleic acid

sequence or the complete expressible sequence is connected in the sense direction with the nucleic acid sequence according to claims 45.

55. (previously presented) Nucleic acid sequence according to claim 53, wherein the expressible nucleic acid codes for an invertase.

56. (previously presented) Nucleic acid construct according to claim 55, characterized in that the part of the nucleic acid sequence of an invertase or the complete sequence of an invertase is connected in the antisense direction with the nucleic acid sequence according to claim 45.

57. (previously presented) Nucleic acid construct according to claim 55, characterized in that the invertase is of the type present in a structure selected from the group comprising anthers, tapetum, pollen precursor cells and pollen.

58. (currently amended) Nucleic acid construct according to claim [[53,]] 55, wherein the invertase comes from the organism or from the plant group including the species into which the nucleic acid construct is to be introduced.

59. (currently amended) Nucleic acid construct according to claim [[53,]] 55, wherein the organism is selected from the group comprising food plants, ornamental plants and medicinal plants.

60. (previously presented) Vector comprising:

a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 and/or

an expression system comprising at least one of said nucleic acid sequences, and/or

a nucleic acid construct comprising at least one of said nucleic acid sequences and at least part of an expressible nucleic acid sequence selected from the group comprising expressible nucleic acid sequences, which code for translation products, which have a direct or indirect action and functional nucleic acids.

61. (previously presented) Cell, comprising:

a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 and/or

an expression system comprising at least one of said nucleic acid sequences, and/or

a nucleic acid construct comprising at least one of said nucleic acid sequences and at least part of an expressible nucleic acid sequence selected from the group comprising expressible nucleic acid sequences, which code for translation products, which have a direct or indirect action and functional nucleic acids.

62. (previously presented) Cell, characterized in that the cell comprises a nucleic acid sequence according to claim 61, which is a promoter, and a nucleic acid coding for an inhibitor of an intervase, the promoter controlling the expression of the inhibitor.

63. (previously presented) Cell according to claim 61, wherein the cell is selected from the group comprising pollen cells, pollen precursor cells and tapetum cells.

64. (previously presented) Cell according to claim 61, wherein the cell is an arrested pollen cell.

65. (previously presented) Plant comprising a cell according to claim 61.

66. (previously presented) Plant according to claim 65, wherein the plant is selected from the group comprising food plants, ornamental plants and medicinal plants and is preferably selected from the group comprising rice, maize, potatoes, tomatoes, rape, soya and sugar beet.

67. (previously presented) Plant according to claim 65, wherein the plant is a male, sterile plant and has at least one further modification of its genotype, particularly a modification caused by genetic engineering.

68. (previously presented) Seed of a plant according to claim 65.

69. (currently amended) Hybrid seed, obtainable in that a male, sterile plant according to claim [[65]] 67 is hybridized with another male, fertile plant and the hybrid seed is obtained from the resulting filial generation.

70. (previously presented) Process for the production of male, sterile plants, wherein a nucleic acid construct according to claim 55 is introduced into a cell, particularly into a plant cell and a plant is produced from said cell.

71. (previously presented) Process according to claim 70, wherein the plant is selected from the group comprising food plants, ornamental plants and medicinal plants and is preferably selected from the group comprising rice, maize, potatoes, tomatoes, rape, soya and sugar beet.

72. (previously presented) Use of a nucleic acid construct according to claim 55, for producing sterile, male plants.

73. (previously presented) A method for expression of a nucleic acid sequence, said method involving a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1.

74. (previously presented) Restorer plant, characterized in that in one or more of its cells it comprises a nucleic acid coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for a further invertase, which is controlled by said promoter, the further invertase differing from the cell's own invertase.

75. (previously presented) Restorer plant, wherein in one or more of its cells it comprises a nucleic acid coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for a saccharose transport system and which is controlled by said promoter.

76. (previously presented) Restorer plant according to claim 75, wherein in one or more of its cells, it comprises a nucleic acid coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for saccharose synthase and/or cytoplasmically expressed invertase and whose expression is controlled by the promoter.

77. (previously presented) Plant, wherein in one or more of its cells, it comprises a nucleic acid construct according to claim 55 and the cell or cells further comprise a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for a further invertase and which is controlled by said promoter, the further invertase differing from the cell's own invertase.

78. (previously presented) Plant, wherein in one or more of its cells, it comprises a nucleic acid construct according to claim 55 and the cell or cells also comprise a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for a saccharose transport system, which is controlled by said promoter.

79. (previously presented) Plant, according to claim 78, wherein in one or more of its cells, it comprises a nucleic acid construct according to claim 78 and the cell or cells also comprise a nucleic acid sequence coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID. No. 1 as promoter and a nucleic acid coding for saccharose synthase and/or



cytoplasmically expressed invertase, whose expression is controlled by the promoter.

80. (previously presented) Plant according to claim 74, wherein the further invertase, differing from the cell's own invertase, is selected from the group of invertases comprising invertases of *Saccharomyces cerevisiae* and invertases of *Zymomonas mobilis*.

81. (currently amended) Plant according to claim [[75,]] 76, wherein the saccharose synthase is of a heterologous or homologous origin.

82. (currently amended) Plant according to claim [[77,]] 79, wherein the cytoplasmically expressed invertase is of a homologous or heterologous origin.

83. (previously presented) Plant according to claim 82, wherein the cytoplasmically expressed invertase is of a heterologous origin and is preferably selected from the group of invertases comprising invertases of *Saccharomyces cerevisiae* and invertases of *Zymomonas mobilis*.

84. (previously presented) Seed of a plant according to claim 74.

85. (previously presented) A method for in vitro embryogenesis of haploid or diploid or double diploid plants, comprising germinating a seed of claim 84.

86. (previously presented) Fruit, particularly seedless fruit, of a plant according to claim 65.

87. (previously presented) Fruit of a plant according to claim 74.

88. (previously presented) Process for cloning promoters, which are functionally homologous to one of the promoters coding for a both tapetum-specific and pollen-specific promoter, the nucleic acid sequence comprising a range of at least 900 nucleotides upstream of the TATA box of the sequence represented in SEQ.ID.

No. 1, characterized by the following steps:

- c) cloning anther-specific invertase cDNA by RT-PCR of mRNA from anthers, including optionally using oligonucleotides OIN3 and OIN4,
- d) cloning the corresponding promoters.